

APPLICATION NO. 10/716276

June 9, 2005

YR

CLMPTO

CLAIMS 1-9 (CANCELLED)

10. (currently amended) A method of forming a laterally extending trench in a semiconductor material underneath an extrinsic base of a BJT, comprising
choosing a wafer with a <100> crystal orientation,
etching a vertically extending STI region next to the extrinsic base,
and
using an anisotropic etchant to etch the laterally extending trench
to extend laterally from the STI,
~~A method of claim 8, wherein the choosing of the crystal orientation is~~
~~chosen so that the includes choosing a lateral trench extends direction that is in~~
the <110> direction.
11. (original) A method of claim 10, wherein the semiconductor material is silicon.
12. (original) A method of claim 11, wherein the etchant is a wet anisotropic silicon etchant.
13. (original) A method of claim 12, wherein the etchant includes KOH.
14. (original) A method of claim 13, wherein the etchant further includes alcohol and water.
15. (original) A method of claim 12, wherein the etchant includes TMAH.